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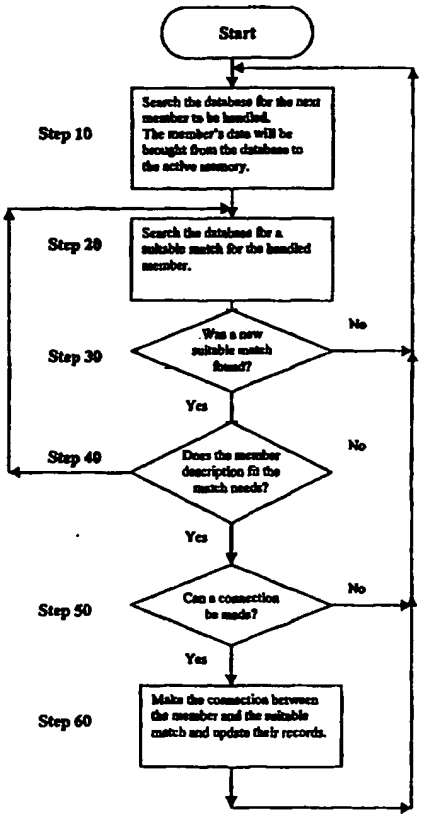
(54) Title: AUTOMATED ON–LINE MATCHMAKING

(57) Abstract

The present invention relates to an automated matchmaking apparatus. The apparatus comprises an automated system in which all members information is stored and is operative to perform a matchmaking task, and a communication unit operative to generate an immediate and real–time connection between two members that are found to be suitable matches for each other. Once a suitable couple is found, the system automatically generates a connection between the parties, using any means of communication in the most convenient time for both parties. Once a connection is done, the system updates the database record sets of the parties, and will not make the same match twice. According to a preferred embodiment of the present invention, the apparatus includes a computer equipped with matchmaking software to perform the matchmaking process, to hold update new and existing members and to perform all communications in and out of the system, a communication card operative to perform the connections between the parties themselves and the system, and a phone network as the connection media for the purposes of this preferred embodiment.



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AUTOMATED ON-LINE MATCHMAKING

FIELD OF INVENTION

The present invention relates to apparatus and methods for automated on-line matchmaking.

BACKGROUND OF THE INVENTION

The field of matchmaking is as old as mankind history, and the matchmaking process by itself had come a long way since that time. Matchmaking can be conducted for serious purposes such as wedding, and may also be carried out for pleasure and entertainment purposes, because nobody likes being alone. Today, when using a computer, a matchmaker can hold a very big database of potential clients and using simple applications most of the work of the human matchmaker is done automatically. In fact, in some systems no human's intervene is required once or ever, and the process is done automatically. One problem still remains, and is related to the nature of man. People are usually afraid to make the first step, and once more, people like to make their life easy, they want things to happen by them selves.

SUMMARY OF THE INVENTION

The present invention seeks to provide improved ways to make a connection between people in a fully automated way, and in the most efficient and comfort way possible.

The connection process, the matchmaking, will be carried out using an automated system as described hereinafter, in which the system will try to find a suitable match for each registered member of the system. Once a suitable couple is found, the system will automatically generate a connection between the parties, using any means of communication in the most convenient time for both parties. For example, if the system is to be used by phone, the system will

dial to both parties at the same time and after a short introduction session will let them talk freely with each other. No action is required from any of the parties in order to generate the first connection. Once a connection is done, the system will update the database record sets of the parties, and the system will not make the same match twice.

There is thus provided, in accordance with a preferred embodiment of the present invention, apparatus for automated matchmaking system, the apparatus including a computer operative to perform the matchmaking process and to hold and update new and existing members of the system, a communication card operative to perform the connections between the parties themselves and the system, and a phone network as the connection media for the purposes of this preferred embodiment.

Further in accordance with a preferred embodiment of the present invention, the computer is comprising with a hard-disk, operative to hold and update the data pertaining the different members of the system and a log file of all completed actions.

Still further in accordance with a preferred embodiment of the present invention, the communication card should be operative to handle at least 2 phone lines at the same time.

Additionally in accordance with a preferred embodiment of the present invention, the computer is equipped with matchmaking software operative to perform the matchmaking process, register new members and to perform all communications in and out of the system.

Further in accordance with a preferred embodiment of the present invention, the computer software comprising a billing utility operative to produce bills for the registered members in accordance to the system rules.

Further in accordance with another preferred embodiment of the present invention, a system as described above comprising additional computer software capable of detecting emotions using voice analysis, suitable for

providing audio or visual messages to the connected members, in case embarrassment or high emotional levels are detected.

Also provided in accordance with another preferred embodiment of the present invention, is a system as described above, where all communication is done over a computer network, such as the Internet.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be understood and appreciated from the following detailed description, taken in conjunction with the drawings in which:

Fig. 1 is a block diagram of a system operative to perform the preferred embodiment of the present invention as described above.

Fig 1A is a pictorial illustration of a system for automated matchmaking.

Fig. 2 is a simplified flowchart illustration of a preferred method for the automated matchmaking process of the system.

Fig 3 is a simplified flowchart illustration of a preferred method for the automated registration procedure of new members to the system.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Hereinafter presented drawing and figures of one preferred embodiment of the present invention to aid in the understanding the implementation of the present invention:

Fig. 1 is a block diagram of a system operative to perform the preferred embodiment of the present invention as described above. As shown, remote users (Remote posts "1","2" and "3") are connected to the system via phone line and using the communication unit "C" for registering, or updating their personal details or the requested match details in the system (herein referred as the "Personal Details" and the "Suitable Match Details"). The system's CPU

loaded with the matchmaking software "D" is updating the database "E" with the incoming data from the remote users, and using the RAM memory "F" is finding suitable matches for each member. Once a suitable match is found, the CPU Generates a signal to the communication unit "C" that will simultaneously call the 2 suitable members and a connection between them will be generated (Remote Posts "A" and "B"). In fig.1, two communication units are presented for clarity, but there is no need for actual 2 units, and one communication unit such as any suitable computer communication card can be used. On the other hand, if required, additional communication units may be used.

Fig. 1A is a pictorial illustration of a system for automated matchmaking. As shown, 2 remote users are connected via computer network to the "matchmaking server", and the "matchmaking server" is connecting between them to enable a textual or vocal communication between them.

Fig. 2 is a simplified flowchart illustration of a preferred method for the automated matchmaking process of the system. The method of fig. 2 preferably includes the following steps conducted in a preferably non-stop manner:

Step 10: The system searches the database for the details of the next member to be handled. The next member can be randomly selected or automatically determined by the system according to pre-defined criteria such as time passed since the last match was found for this member. Once the system has determined about the next member to be handled (hereinafter referred to as Member "a"), member's "a" details and suitable match criterions are loaded to the RAM (read only memory).

Step 20: The system will search the database for a suitable match for the handled member "a". At this step the system searches for a match according to the "suitable match details" of the handled member "a", and the "personal details" of the stored members. The search takes into account not to make the same connection twice and therefore the database stores also all the ID numbers of previously matched members.

Step 30: if a new suitable match is found (hereinafter referred as member "b"), the system proceeds to step 40. If a suitable match for member "a" was not found, the system returns to step 10.

Step 40: Check if the match is good for both members, i.e. the handled member "a" personal description fits the "suitable match details" of the newly detected member "b". If the match is good for both sides, the system proceeds to step 50, otherwise the system returns to step 20.

Step 50: Check if a connection between the 2 members can be established by dialing to the members simultaneously, or by any other means of communication according to the system capabilities. If a connection can be made the system proceeds to step 60, if not the system returns to step 10.

Step 60: Make a connection automatically between members "a" and "b". A connection can be of any kind, such as by phone, by Internet or by any other way. Once a connection was established, update the database records of both members so the system will know not to make the same connection again, and for further references. Once a connection was made, the system returns to step 10.

It is appreciated that any different model of matching between the members can be applied on other embodiments of the present invention.

It is appreciated that the system can also be capable of performing the same matching model not only for one member at a time, but also for several members "a" at the same time.

Fig 3 is a simplified flowchart illustration of a preferred method for the automated registration process of new members to the system. The method of fig. 3 preferably includes the following steps:

Step 100: Accept the incoming call and play or display a greeting message, according to the system nature. The greeting message preferably includes information about the system and other information the new member may find useful at this stage.

Step 110: play or display instructions about the registration procedures. These instructions preferably include step-by-step instructions about the registration process.

Step 120: At this stage, the new member will be requested to enter his personal information as defined above, preferably including age, gender, general description and additional information about himself as it will be decided in each embodiment of the present invention. The information can be entered to the system using voice, i.e. by recording the information vocally over the phone or any other means of voice transfer, using the phone number pads, or using a keyboard and/or mouse in case the present invention will be set to be used over a computer network. It is appreciated that additional means of registration may be applied to suit different embodiments of the present invention. The system opens a record set in the database to include all the details entered so far, and those who will be entered in step 130 as defined hereinafter.

Step 130: At this stage, the user will be requested to enter his/her definition of a "suitable match criterions" as defined above, preferably including age range, preferred gender, preferred general description and additional information pertaining the suitable match as it will be decided in each embodiment of the present invention. As with the personal information, the "Suitable Match" information can also be entered to the system using voice, using the phone keys, or using a keyboard and/or mouse. It is appreciated that additional means of registration may be applied to suit different embodiments of the present invention. The system will update the new member's record set in the database with the new information.

Step 140: The final registration phase. The system will announce that the registration process is completed, by playing or displaying a closing greeting.

"Personal details" may preferably include the member's age, gender, height, eyes color, hair color, city of residents, hobbies, education level, areas

of interest and any additional information as may be found suitable to include. The personal details can preferably include also a "First Introduction Statement" recorded in the member's voice that will be played by the system once a connection between two members has been established.

"Suitable Match Details" may preferably include the requested age range, requested gender, and other conditional details to be considered when the "Match making" system is searching for suitable matches.

A "Suitable Match" is a case when the system found two members that fully meets each other criteria as defined by their own "Personal details" and the other member "Suitable Match Details".

A "Record Set" is a term used to describe a field in the system's database that is used to store all the member's information, preferably including the member's ID or Reference No., the member's personal details, "Suitable Match Details", and a log of all actions performed with the member.

In the illustrated embodiment of Fig. 1, the Communication Unit (c), is used to perform the connection between the CPU (d) and the remote members. For example, if the system is to be used over phone the Communication Unit should be capable of performing phone calls, dial to a selected phone number, and generate a connection between two lines.

In the illustrated embodiment of Fig. 1, the CPU (d) is used to perform the "matchmaking application", in conjunction with the Database, the Communication Unit, and the RAM unit. It is appreciated that any kind of matchmaking application or technique can be used in the present invention, and may even be in a form of hardware utility applied to ROM in conventional techniques.

In the illustrated embodiment of Fig.1, the Database (e) is used to store all the members details in record sets. For example, a record set may preferably include the following details: ID number, Name, City of residence, Age, Phone Number, Gender, eyes color, hair color, etc., and a suitable match criterions

such as: required gender, required age range, required city of residence, required hair color, required eyes color, etc.

It is appreciated that all of the details requested and presented above for the personal details and for the suitable match details are merely examples and are typically application-dependent.

It is appreciated that the software components of the present invention may, if desired, be implemented in ROM (read-only memory) form. The software components may, generally, be implemented in hardware, if desired, using conventional techniques.

It is appreciated that the particular embodiments described in the illustrated embodiment are intended only to provide an extremely detailed disclosure of the present invention and are not intended to be limiting.

It is appreciated that various features of the invention which are, for clarity, described in the contexts of separate embodiments mat also be provided in combination in a single embodiment. Conversely, various features of the invention which are, for brevity, described in the context of a single embodiment mat also be provided separately or in any suitable sub-combination.

It will be appreciated by a persons of skills in the art that the present invention is not limited to what has been particularly shown and described herein above. Rather, the scope of the present invention is defined only by the claims that follow:

CLAIMS

1. Apparatus for automated matchmaking, the apparatus comprising:
An automated system in which all members information is stored and is operative to perform a matchmaking task, and a communication unit operative to generate an immediate and real-time connection between 2 members that are found to be suitable matches for each other.

2. Apparatus according to claim 1 wherein said connection is performed using any kind of known or possible communication technology.

3. Apparatus according to claim 1 wherein said connection is performed using phone lines or cellular phone lines.

4. Apparatus according to claim 1 wherein said connection is performed using a computer network such as the Internet as the connection media.

5. Apparatus according to any of the proceeding claims wherein said connection is done automatically to both members by the system.

6. Apparatus according to any of the proceeding claims wherein said connection is done simultaneously to both members by the system.

7. Apparatus according to any of the proceeding claims wherein said connection is done automatically and simultaneously to both members by the system.

8. Apparatus according to any of the proceeding claims wherein said connection is done automatically and a permission to continue is

requested by any of the contacted members or from both members at the same time.

9. Apparatus according to any of the proceeding claims wherein said connection is monitored by the system.

10. Apparatus according to any of the proceeding claims wherein said connection is emotionally monitored by the system for the purpose of making automated remarks and/or intervene in the conversation.

11. Apparatus according to any of the proceeding claims wherein said connection is emotionally monitored by the system for the purpose of detecting constant excitement or love in the conversation using existing or new voice analysis technologies.

12. A method according to any of the preceding claims and substantially as shown and described above.

13. A method according to any of the preceding claims and substantially as illustrated in any of the drawings.

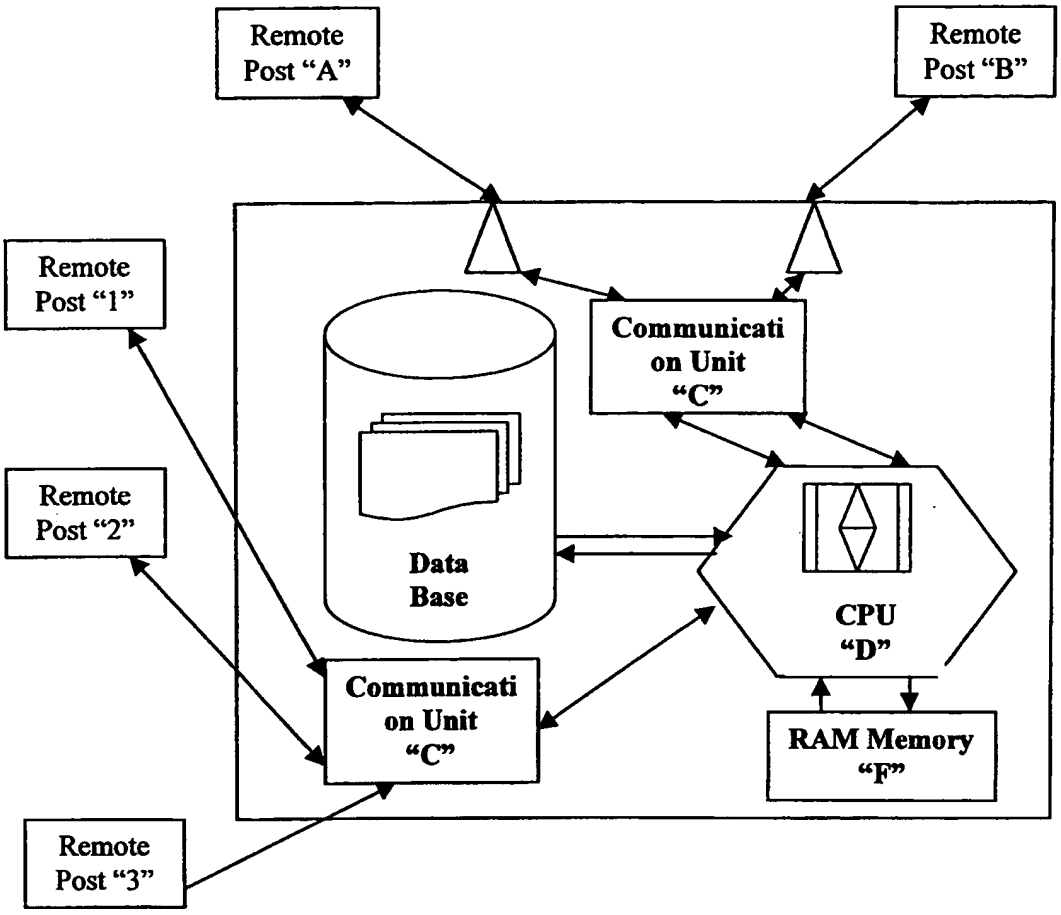
Remote Post "A"
Remote Post "B"
Remote Post "1"
Remote Post "2"
Remote Post "3"
Communicati on Unit "C"
Data Base
CPU "D"
Communicati on Unit "C"
RAM Memory "F"

FIGURE 1

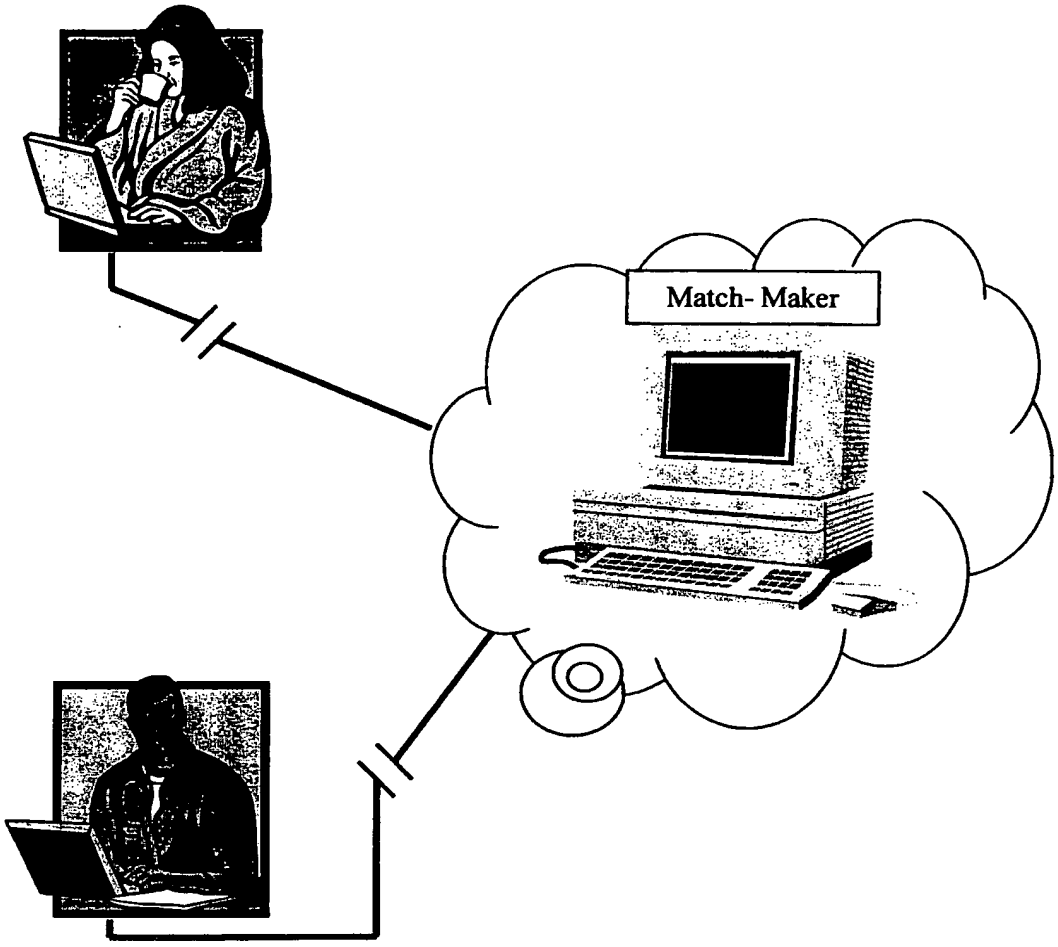

FIGURE 1A

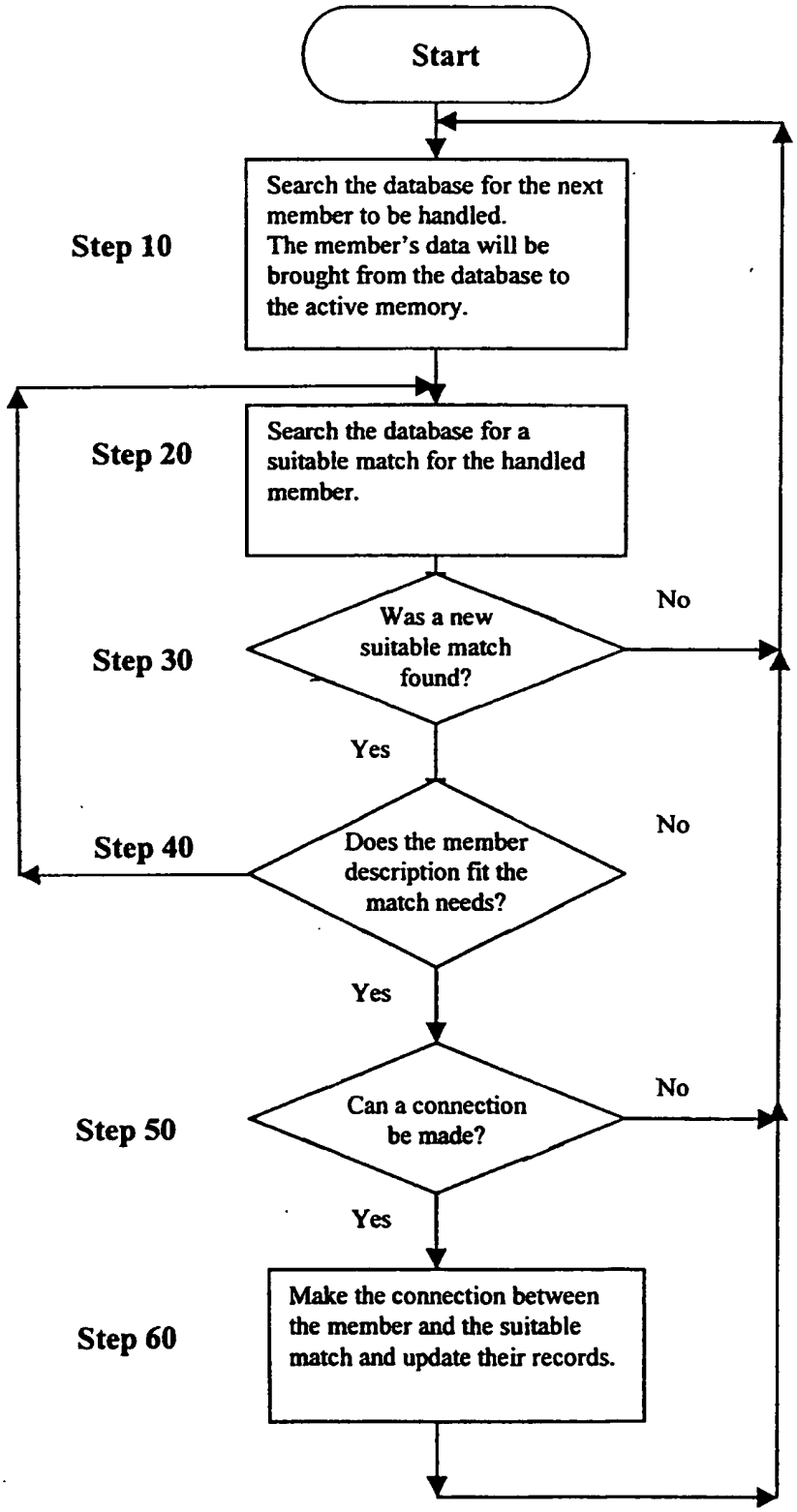
Start
Search the database for the next member to be handled. The member's data will be brought from the database to the active memory.
Step 10
Search the database for a suitable match for the handled member.
Step 20
Was a new suitable match found?
Step 30
No
Yes
Does the member description fit the match needs?
Step 40
No
Yes
Can a connection be made?
Step 50
No
Yes
Make the connection between the member and the suitable match and update their records.
Step 60

FIGURE 2

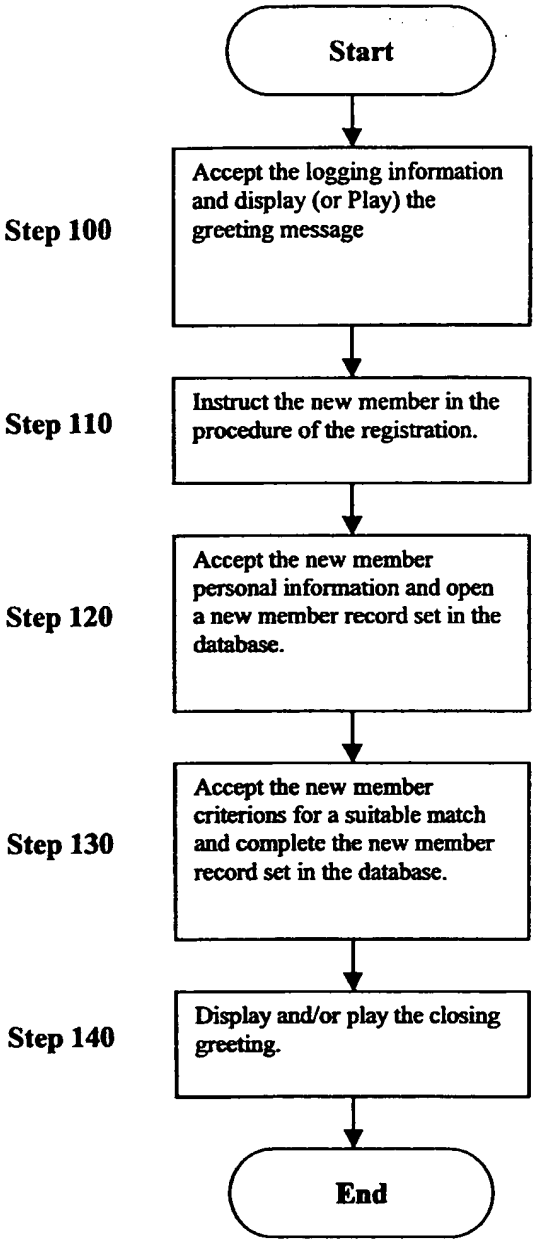
Start
Step 100
Accept the logging information and display (or Play) the greeting message
Step 110
Instruct the new member in the procedure of the registration.
Step 120
Accept the new member personal information and open a new member record set in the database.
Step 130
Accept the new member criterions for a suitable match and complete the new member record set in the database.
Step 140
Display and/or play the closing greeting.
End

FIGURE 3

INTERNATIONAL SEARCH REPORT

Inte onal Application No
PCT/IL 00/00217

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G08B1/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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PAJ, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"www.match.com" 'Online! 1993 , MATCH. COM INC. COPYRIGHT 1993 , INET XP002142317 Retrieved from the Internet: <URL: www.match.com> 'retrieved on 2000-07-11! the whole document	1-7,9
X	DE 298 18 638 U (MESZAROS ARPAD G DIPL ING) 11 February 1999 (1999-02-11) the whole document	1-3
P,X	US 5 950 200 A (SUDAI GIL S ET AL) 7 September 1999 (1999-09-07) claims 1,30,31	1-7,9
A	NL 1 001 830 C (NL APPARATENFABRIEK OENEDAPOE) 10 June 1997 (1997-06-10) claims 1-3	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
12 July 2000	26/07/2000

Name and mailing address of the ISA	Authorized officer
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Information on patent family members

Inte. onal Application No
PCT/IL 00/00217

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29818638 U	11-02-1999	DE 29904686 U	10-06-1999
US 5950200 A	07-09-1999	NONE	
NL 1001830 C	10-06-1997	NONE	